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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/866,658	05/30/2001	Jingyu Qiao	010700	5132

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WESTERMAN, HATTORI, DANIELS & ADRIAN, LLP  
1250 CONNECTICUT AVENUE, NW  
SUITE 700  
WASHINGTON, DC 20036

EXAMINER

MILIA, MARK R

ART UNIT	PAPER NUMBER
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2622

DATE MAILED: 07/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/866,658

Applicant(s)

QIAO, JINGYU

Examiner

Mark R. Milia

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07 March 2005.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-9 and 11 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-9 and 11 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

***Response to Amendment***

1. Applicant's amendment was received on 3/7/05, and has been entered and made of record. Currently, claims 1-9 and 11 are pending.

***Priority***

2. Applicant's arguments filed on 3/7/05 have overcome the denial to claim foreign priority as cited in the previous Office Action. Therefore, applicant's claim for priority under 35 U.S.C. 119(a)-(d) based upon application 2001/017427 filed in Japan on January 25, 2001 is granted.

***Response to Arguments***

3. Applicant's arguments filed 3/7/05 have been fully considered but they are not persuasive. Upon review of the reference of Endo, in conjunction with the reference of Hasegawa, which was cited in the Office Action dated 12/14/04 under 35 U.S.C. 103(a), the examiner notes that the references can still be interpreted as disclosing the claim limitations, as currently amended.

In response to applicant's arguments regarding the rejection of claims 1, 4, and 7, wherein on pages 9-11, the applicant explains how the current invention differs from the teachings of Endo and Hasegawa. Particularly, the applicant asserts that Endo fails to disclose, as currently amended, the updating and storing of client-associated last received time by client, the client-associated last receiving time being the last time when the printer received the packet for using the printer from the client. The examiner respectfully disagrees with the applicant as the reference of Endo does disclose such a feature. Endo discloses print start and print end sections, which store the time that the printing started and the time that the printing ended relating to a particular print job. These values are used to calculate the when and for how long the printer should be in a sleep mode. Support for this can be found in Table 1, column 4 lines 25-51, and column 5 lines 12-25 and 35-44. The applicant further asserts that Endo does not disclose, as currently amended, a printer usage rate computer that determines client condition based on the client-associated last received time, the client condition being idle condition when the packet is not received for a predetermined time, and computes a printer usage rate when the client condition is not idle condition. The examiner respectfully disagrees with the applicant as the reference of Endo does disclose such a feature. Endo discloses a system that uses calculations to control a printer to enter a sleep mode after a predetermined period without receiving print data from the system (see column 5 lines 12-14). This is analogous to the determining of a printer usage rate when the printer is in an idle condition. Endo also discloses calculations that take place when the printer is not in a continuous idle condition to determine at what time in

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the future the sleep mode should be implemented. These calculations involve the use of the time at which print jobs have been received and the time between the reception of print jobs (see Table 1, column 5 lines 48-61, column 6 lines 3-32 and column 11 line 37-column 12 line 17). This is analogous to computing a printer usage rate when the printer is not in an idle condition.

Therefore, the rejection of claims 1-9, as cited in the Office Action dated 12/14/04, under 35 U.S.C. 103(a), is maintained and repeated in this Office Action. Claim 11 will be addressed in the following rejection as well.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Endo in view of Hasegawa.

Regarding claims 1, 4, and 7, Endo discloses a system which supports a power save mode and performs printing by receiving a print request from a client comprising: a packet monitor that monitors a packet, and updates and stores client-associated last received time by client, the client-associated last receiving time being the last time when the printer receives the packet for using the printer from the client (see column 3 line 66-

column 4 line 51, reference shows a computer that requests print jobs from a printer connected thereto which is a packet of information therefor the reference teaches the claimed element), a printer usage rate computer that determines client condition based on the client-associated last received time, the client condition being idle condition when the packet is not received for a predetermined time, and computes a printer usage rate when the client condition is not the idle condition (see Table 1, column 5 lines 15-25 and 48-61, column 6 lines 3-18, and column 11 line 37-column 12 line 17, reference states the storage of print start times, print end times, interval of time between print jobs, and interval of time between last print job and the present time which is used to show the usage rate, also known as standby values, of the printer and thus calculate the sleep time that serves the same function as the claimed element), and a time setting unit that sets the length of time to switch to the power save mode based on the printer usage rate (see Table 1 and column 5 lines 12-14).

Endo does not disclose expressly receiving print requests via a network.

Hasegawa discloses receiving print requests via a network (see page 1 <0011>, page 3 <0018>-<0021>, and page 5 <0026>).

Endo & Hasegawa are combinable because they are from the same field of endeavor, power-save control of printers.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the network feature of Hasegawa with the system of Endo.

The suggestion/motivation for doing so would have been to provide multiple clients and printers with the advantages of a power-saving sleep mode for a printer as

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put forth by Endo that allows a printer to conserve energy when frequency of usage is low (see <0020>-<0021> and <0026> of Hasegawa).

Therefore, it would have been obvious to combine Hasegawa with Endo to obtain the invention as specified in claims 1, 4, and 7.

Regarding claims 2, 5, and 8, Endo and Hasegawa disclose the system discussed in claims 1, 4, and 7, and Endo further discloses a switching unit that switches the power save mode to a standby mode when the printer usage rate computed by the printer usage rate computer is higher than a predetermined value (see column 9 lines 31-47).

Regarding claims 3, 6, and 9, Endo and Hasegawa disclose the system discussed in claims 1, 4, and 7, and Endo further discloses wherein said time setting unit determines the length of time allowed before a transition to the power save mode, by determining a power save interval according to the printer usage rate and subtracting an elapsed time in a mode other than the power save mode from the power save interval (see Table 1 and column 5 lines 35-44).

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Endo and Hasegawa as applied to claim 1 above, and further in view of U.S. Patent No. 5557748 to Norris.

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Endo and Hasegawa do not disclose expressly a list generator that generates a list of the clients which is working on the network when the packet is received by the printer.

Norris discloses a list generator that generates a list of the clients which is working on the network when the packet is received by the printer (see column 10 lines 49-54).

Endo, Hasegawa, & Norris are combinable because they are from the same field of endeavor, configuration of computing systems.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the generating of a list of clients working on the network as described by Norris and which is known in the art, with the system of Endo and Hasegawa.

The suggestion/motivation for doing so would have been to provide quick and easy access to the potential amount of network traffic that may occur and to be able to better prepare and calculate the appropriate active and sleep modes of a printer.

Therefore, it would have been obvious to combine Norris with Endo and Hasegawa to obtain the invention as specified in claim 11.

### ***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. To further show the state of the art refer to U.S. Patent



Application Publication numbers 2003/0103656 (Lapstun et al.), 2003/0233274 (Urken et al.), and 2005/0149364 (Ombrellaro).

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark R. Milia whose telephone number is (571) 272-7408. The examiner can normally be reached M-F 8:00am-4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Coles can be reached at (571) 272-7402. The fax number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Mark R. Milia  
Examiner  
Art Unit 2622

MRM

JOSEPH R. POKRZYWA  
PRIMARY EXAMINER  
ART UNIT 2622

A handwritten signature in cursive script, reading "Joseph R. Pokrzywa".